

(1.58 vs. 0.36, $p < 0.01$), physician (10.17 vs. 8.96, $p < 0.01$) and ED visits (1.12 vs. 0.67, $p < 0.01$) than NoRxOP patients in the follow-up period. RxOP users had twice the total healthcare costs (\$49,766 vs. \$19,875, $p < 0.01$) than NoRxOP patients. **CONCLUSIONS:** A large percentage of patients are prescribed opioids for the first time during ED/inpatient visits and incur a significantly higher resource use and economic burden than those who are not.

PMH25

COST AND USE OF RESOURCES IN PATIENTS WITH SCHIZOPHRENIA AND BIPOLAR DISORDER SWITCHING FROM IMMEDIATE RELEASE QUETIAPINE (QTP-IR) TO EXTENDED RELEASE QUETIAPINE (QTP-XR) IN ITALY- THE IBIS STUDY

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OBJECTIVES: Schizophrenia and bipolar disorder (BD) are psychiatric disorders that are associated with a substantial clinical and economic burden. Hospitalization and in-patient care commonly account for a large proportion of medical costs in these illnesses. A secondary objective of the Italian Burden of Illness on Schizophrenia and BD (IBIS) study is to assess any differences in terms of cost of illness for patients with schizophrenia and BD switching from QTP-IR to QTP-XR. **METHODS:** Multicenter, retrospective, observational, real world cohort study (NCT01392482). The data shown are interim results collected from administrative databases in 6 of 20 Italian Local Health Units included in the study. Data were collected between 1 January 2009 and 31 December 2010. Patients that switched from QTP-IR to QTP-XR were included for analysis. Data were collected 6 months before (IR period) and 6 months after (XR period) the switch. **RESULTS:** In total, 213 patients switched medication from QTP-IR to QTP-XR (86 with schizophrenia, 127 with BD). For patients with schizophrenia, disease-related costs per patient totaled €4123 during the IR period and €3832 during the XR period, indicating a decrease of 7%. Although hospitalization costs per patient remained similar after the switch (IR period: €1111, 26.9% of total costs; XR period: €998, 26.0% of total costs), care/nursing home costs decreased in the XR period (IR period: €1906, 46.2% of total costs; XR period: €1330, 34.7% of total costs). For patients with BD, disease-related costs per patient decreased by 23%, from €3877 during the IR period to €2,973 during the XR period. Hospitalization costs per patient fell substantially after the switch (IR period: €2659, 68.6% of total costs; XR period: €1,171, 39.4% of total costs). **CONCLUSIONS:** These interim results suggest that switching from QTP-IR to QTP-XR decreases direct health care costs and in-patient resource use.

PMH26

MODELING ECONOMIC CONSEQUENCES OF CARDIOMETABOLIC CHANGES WITH LURASIDONE VERSUS OTHER ATYPICAL ANTIPSYCHOTICS IN SCHIZOPHRENIA

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OBJECTIVES: To assess the cost-consequences of cardiometabolic effects of lurasidone versus other atypical antipsychotics in adults with schizophrenia and compare the results based on published cardiovascular and diabetes risk equations from the Framingham Heart Study (FHS), the Atherosclerosis Risk in Communities study (ARIC), and the San Antonio Heart Study (SAHS). **METHODS:** A discrete event simulation model was developed to simulate the economic outcomes based on cardiometabolic parameter changes after 1-year treatment. With a 3-year time horizon, the model predicted the number of: 1) incident diabetes cases using each of the risk equations, and 2) cardiovascular events (e.g., coronary heart disease (CHD), stroke) (CVD) based on updated cardiometabolic values at 1 year, and estimated the costs associated with each event. Data were drawn from comparative clinical trials of lurasidone for lurasidone, risperidone, and quetiapine, and from the literature for olanzapine. Cost data in 2011 values were obtained from public data sources and discounted at 3.5% annually. **RESULTS:** Compared with olanzapine, risperidone, and quetiapine, lurasidone: 1) avoided 119, 15, and 7 diabetes cases and saved \$1708, \$192, and \$95 per patient, excluding the costs of antipsychotics and other events, respectively, when using FHS equation; 2) avoided 58, 8, and 0 diabetes cases and saved \$1,036, \$114, and \$22 when using SAHS equation; and 3) avoided 52, 7, and 7 diabetes cases and saved \$900, \$76, and \$88 when using ARIC equation. Incidence of other CVD events was low across all drugs in the model due to the short time-horizon. Lurasidone saved ≥\$9600 per patient in all comparisons when costs of other CVD events and antipsychotics were included. **CONCLUSIONS:** In this analysis, lurasidone was a cost-saving option compared to other antipsychotics. Although the magnitude of cost savings with lurasidone differed based on the risk equation used, cost savings with lurasidone were consistently observed.

PMH27

ECONOMIC IMPACT ASSOCIATED WITH ANTIDEPRESSANT USE IN DEPRESSION AND ANXIETY IN COMMUNITY LIVING OLDER ADULTS

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OBJECTIVES: The aim of this study is to assess the health system and patient costs associated with antidepressant (AD) use considering the presence and persistence of depression and anxiety. **METHODS:** The data was retained from a population-based health survey on 2004 community dwelling older adults aged ≥ 65 years participating in the ESA (Étude sur la Santé des Aînés) study. Depression and anxiety were assessed using DSM-IV criteria and measured at 2 time points one year apart. Medical and non-medical costs were considered. Medication and health

service use and costs were identified from provincial administrative databases. The excess costs associated with AD use as a function of mental health status was analysed using generalized linear models with a gamma distribution (log link), controlling for a number of factors. **RESULTS:** The prevalence of antidepressant use reached 15.5%. SSRIs followed by TCAs were the most common. Significantly higher health care costs (Δ : \$2840, Wald $\chi^2=60.00$, $df=1$, $p < 0.0001$) were associated with AD use. Among antidepressant users, the results did not show any differences in costs when accounting for dosage, the number of episodes of use and the presence of antidepressant switches. Among persistent cases of depression and anxiety the use of AD was associated with lower adjusted total costs reaching CDN \$2724 and CDN \$2114, respectively. The use of AD can result in cost savings reaching \$154.6 million and \$118.4 million per 1 000 000 population, for persistent cases of depression and anxiety. **CONCLUSIONS:** This study showed important cost savings associated with AD use in persistent cases of depression and anxiety. Future studies should focus on further exploring potential cost savings associated with different classes of AD in the treatment of different clinical profiles of depression and anxiety and this in the older adult population.

PMH28

IDENTIFYING CHARACTERISTICS OF PATIENTS WITH HIGH SCHIZOPHRENIA-RELATED COSTS

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OBJECTIVES: The objective of this study was to identify the demographic and clinical characteristics of schizophrenia patients who experience high schizophrenia-related direct medical costs. **METHODS:** Patients with a diagnosis for schizophrenic disorder (ICD-9-CM code 295) and other non-organic psychoses (ICD-9-CM code 298) were identified from the 2005-2008 Medical Expenditure Panel Survey (MEPS), a national representative annual survey of non-institutionalized US residents. Schizophrenia-related direct medical costs were calculated for the following utilization categories: inpatient hospitalizations, prescription medications, and outpatient, office-based physician, emergency department, and home healthcare visits. Based on the distribution of their total costs, patients were classified into high-cost (expenditures ≥ \$16,000) and low-cost (expenditures < \$16,000) groups. Logistic regression was used to determine the likelihood of high-cost group membership based on patient demographic and clinical characteristics. Generalized Linear Models (GLM) regression was used to evaluate the relationships between the independent variables and costs. **RESULTS:** There were 317 patients (weighted frequency = 2.75 million) with schizophrenia-related costs. Based on the logistic regression procedure, it was seen that older patients were less likely to be in the high-cost group; for each one-year increase in age, patients were 6.4% less likely to have high costs (odds ratio [OR] = 0.936). Patients with a spouse were 83.0% less likely than those without a spouse to be in the high-cost group (OR = 0.170). The GLM regression procedure showed that age, race, and region of residence were significantly associated with costs. On controlling for other factors, with a one year increase in age, costs decreased by \$127 ($p = 0.001$). Caucasians spent \$3,831 ($p = 0.019$) less than African Americans, and patients living in Southern US spent \$3,718 ($p = 0.01$) less than those living in the Northeast. **CONCLUSIONS:** Identifying the high-risk population may help policy makers allocate resources more efficiently and health care providers manage patients more effectively through assignment of high-risk patients to case managers and appropriate monitoring and treatment.

PMH29

ESTIMATES OF SCHIZOPHRENIA-RELATED DIRECT MEDICAL COSTS USING ATTRIBUTABLE AND INCREMENTAL COST APPROACHES

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OBJECTIVES: To estimate the schizophrenia-related direct medical costs using the attributable and incremental cost approaches. **METHODS:** Patients with a diagnosis for schizophrenic disorder (ICD-9-CM code 295) and other non-organic psychoses (ICD-9-CM code 298) were identified from the 2005-2008 Medical Expenditure Panel Survey (MEPS), a nationally representative annual dataset of non-institutionalized US residents. Schizophrenia-related direct medical costs were estimated for inpatient hospitalizations, prescription medications, and outpatient, office-based physician, emergency department, and home healthcare visits, and overall. For the attributable cost approach, schizophrenia-related costs were identified from each of the MEPS event files. For the incremental cost approach, the differences between the costs for patients with and without schizophrenia for each service type were calculated to yield the schizophrenia-associated incremental costs. **RESULTS:** We identified 348 patients with schizophrenia (weighted frequency = 3.03 million). The mean schizophrenia-related direct medical cost per patient-year using the attributable cost approach was \$5,538 (SE = \$570). With the incremental cost approach, the mean cost per patient-year was \$12,369 (SE = \$1,205) for schizophrenia patients and \$3,198 (SE = \$47) for non-schizophrenia patients. Thus, the incremental cost associated with schizophrenia was \$9171 (SE = 1207) per patient-year. When demographic and clinical factors such as age, sex, race, marital status, insurance status, socioeconomic status, region of residence, perceived health status, mental health status, number of medical comorbidities, and number of mental health-related comorbidities were controlled for using ordinary least squares regression, the mean schizophrenia-related incremental direct medical cost per patient-year was \$5115 (SE = \$1240). **CONCLUSIONS:** This study highlights the high financial burden of schizophrenia. Although the mean cost per patient-year estimated using the incremental cost approach was higher than that obtained using the attributable